

What I'd like you to know about our Solar Instrumentation

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The Solar Ultraviolet Magnetograph Instrument (SUMI)

The High resolution Coronal Imager (Hi-C)

The Chromospheric Lyman-Alpha SpectroPolarimeter (CLASP)

The Marshall Grazing Incidence X-ray Spectrograph (MaGIXS)

The Solar Wind Electron Alphas and Proton (SWEAP) suite for Solar Probe +

(AIA) data captures the full s
8 channels

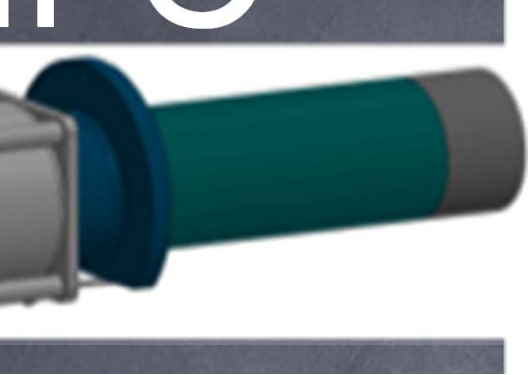
- 1 image in each channel
20 seconds.
- Data collected 24/7
- Spatial resolution of ~ 100

QuickTime™ and a
YUV420 codec decompressor
are needed to see this picture.

QuickTime™ and a
Cinepak decompressor
are needed to see this picture.

- The background images are from AIA (30.4 nm) and the foreground images are from *Hinode*/SOT (Ca II)
- AIA images are ~1000km resolution
- SOT images are ~150 km resolution
- Cadence is basically the same between the two instruments

QuickTime™ and a
H.264 decompressor
are needed to see this picture.



Properties:

23.9m
 $114 \mu\text{m}/\text{arcsec}$
 $f/109$
 $5.1 \times 5.1 \text{ arcmin}$
 0.07 arcsec

n.
 (o.v.)
 or

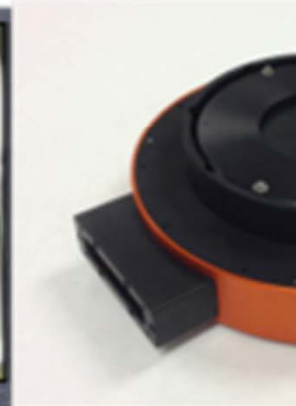
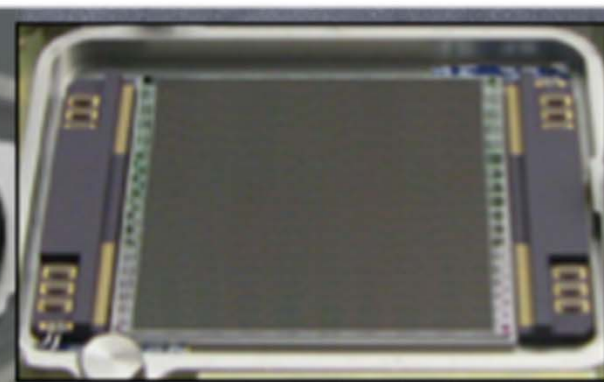
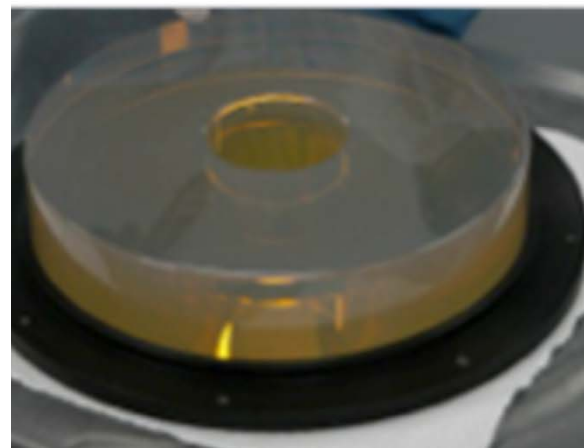
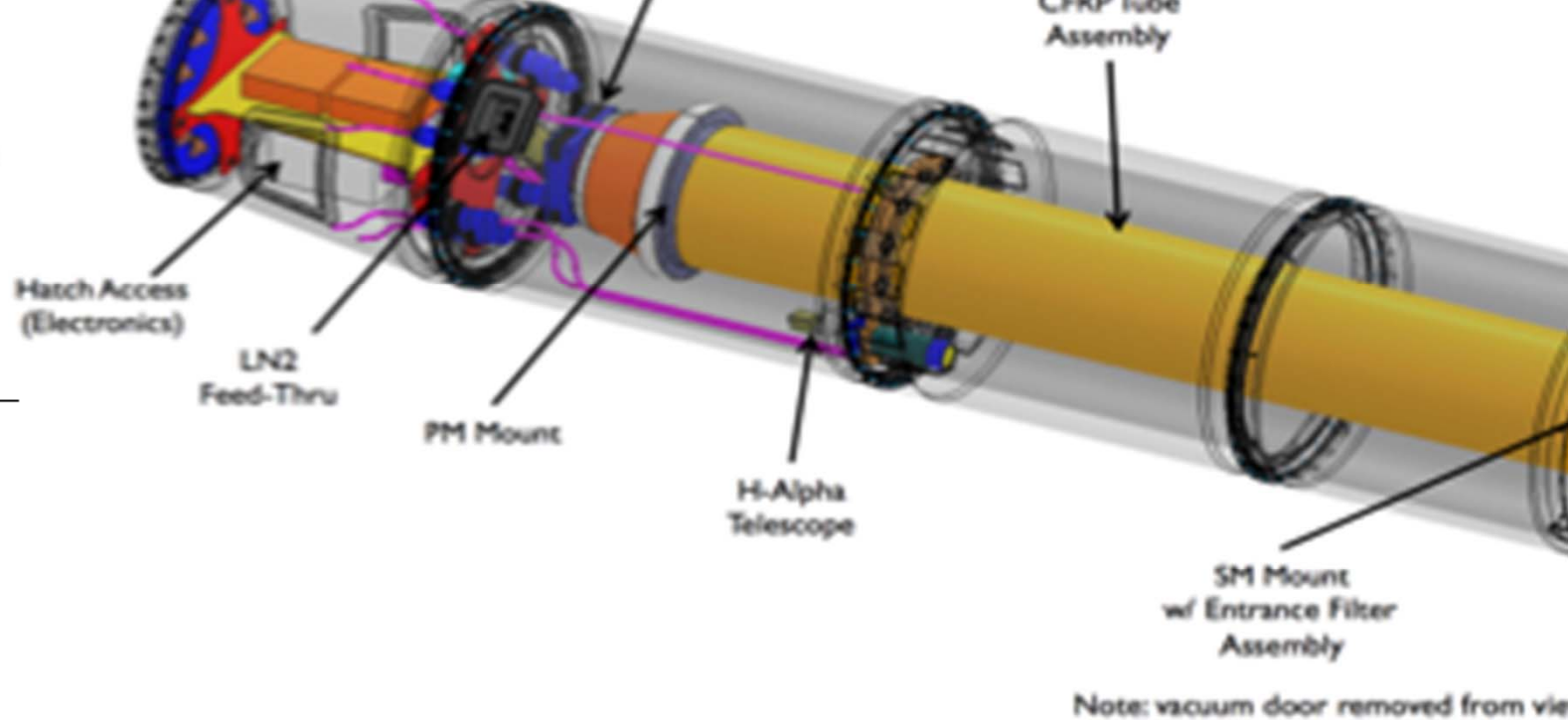
$4000 \pm 4.0 \text{ mm}$
 -0.987569 ± 0.02
 240 mm
 $0.4 \mu\text{rad}$

r
 rror

$370.9 \pm 0.5 \text{ mm}$
 -1.14 ± 0.10
 30 mm
 $0.1 \mu\text{rad}$

r
 :

49.1 mm square
 $4096 \times 4096 \text{ pixels}$
 0.1 arcsec/pixel



Hi-C might best results:



Launch July 11, 2012

Image on right is the AIA/SDO
the day of launch.

Box indicates the selected point
of view for Hi-C.



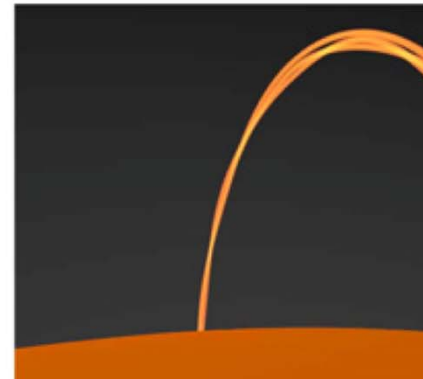
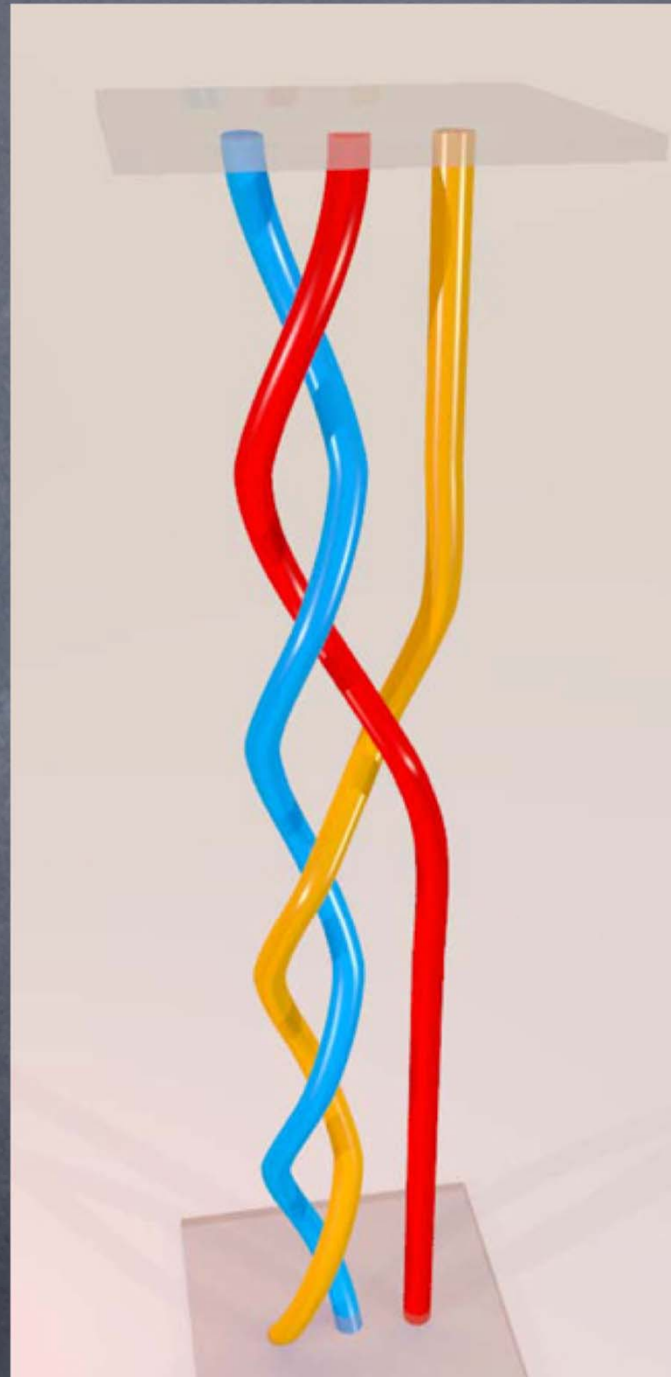
QuickTime™ and a
H.264 decompressor
are needed to see this picture.

we have characterized the telescope MTF

QuickTime™ and a
PNG decompressor
are needed to see this picture.

loop braiding

First postulated by Parker in a series of papers in 1977, braiding is a potential storage mechanism for energy in the solar atmosphere.



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H.264 decompressor
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x-point reconnection!

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H.264 decompressor
are needed to see this picture.

Questions?